

ACC TEACHERS' INNER GAME HANDBOOK

Table Of Contents

I	INNER GAME AT CAMP.....	1
II	EXERCISES & TECHNIQUES.....	13
III	TROUBLESHOOTING.....	69
IV	THE NEXT STEP.....	83
V	LAST WORDS.....	97

I

Inner Game At Camp

POINT A TO POINT B

Long ago and far away, in a land called Sunnyvale...

It must seem like ancient history by now, those two days in April at Atari, spent absorbing as much information and wondering if you could ever assimilate it all.

Your openness, interest and enthusiasm was very much appreciated. Your honest expression of needs and problems, your response to questions and exercises helped us immensely in creating this book. The list of "Requests for Inner Game Help," in particular, was invaluable in deciding which exercises to include here.

WE'VE BEEN BUSY

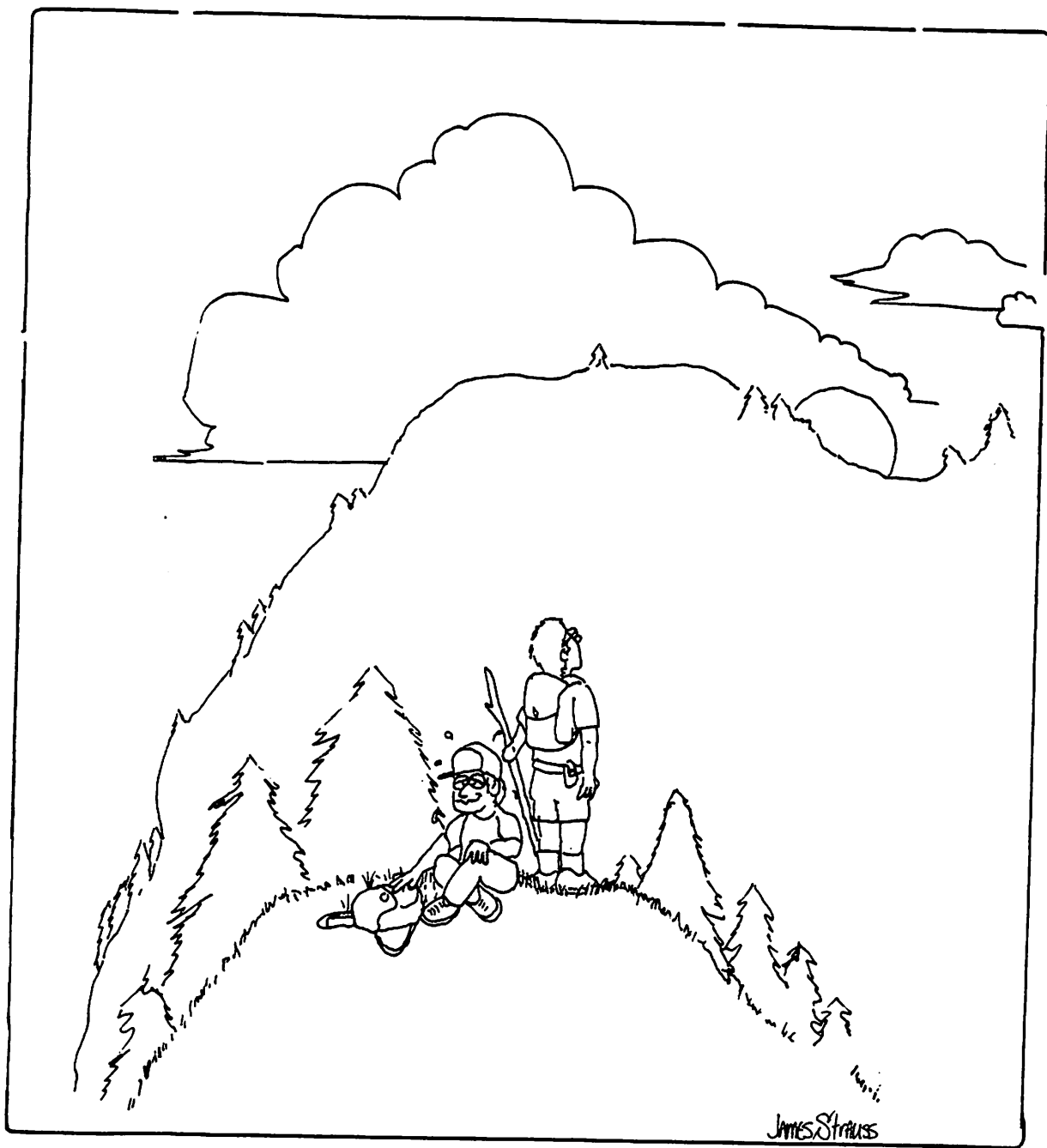
Since the Sunnyvale training, we've continued testing exercises and techniques with computer teachers around the country. In addition, we've continued our dialogue with kids about what they want and need as learners. And, of course, we've incorporated whatever feedback we've received from you. As a result, we feel that the final product - the book you hold in your hands - will serve as a valuable resource for you this summer.

AND WE KNOW YOU'VE BEEN BUSY

Hoping that your end of the year tasks were not so overwhelming as to prevent you from practicing the Inner Game, we now offer you the next edition... What follows is a continuation of what we've already offered. Its purpose is the same:

- o To help you recognize and overcome mental obstacles to learning (both in yourself and in your students.)
- o To provide ways for you to become more skillful in helping your students (and yourself) become more self-motivated and independent learners.
- o To help you increase awareness of your effect on the learning process, and to use this awareness to enhance your classroom effectiveness.

We want this summer to be the best possible learning experience for everyone involved with the Atari Computer Camps. If you've been using Inner Game, we encourage you to keep on exploring it. If you haven't yet had the time or desire, no problem. In either case, you can begin now... From here...



NOW WHAT?

The school year is over. Your pre-camp training and preparation are complete. Hopefully, you've experimented with the Inner Game exercises offered and looked through your Correspondence Course book. Now here you are at camp.

If you're anything like the average earthling, you're probably feeling a mixture of apprehension, excitement, fear, anticipation and disorientation. And that's just for starters! What in the world then, do you need to read another book for?

That's why we've kept the "reading" sections of this book short and to the point. Though there are certain concepts we want to present and some discoveries to share, mostly we want to offer you practical, simple tools to use - tools which will help you overcome your own apprehension (and your students') keep your enthusiasm high, while helping you to stay focused on your goals as well as the goals of the camp.

GETTING BY VS. LEARNING

Goal clarity is an important element of what we intend to provide. As you know, in the day-to-day reality of teaching it's sometimes easy to lose sight of much beyond "making it through to the next class."

As you also know, however, there's a possibility for something far more exciting to happen - a possibility for you and your students to take a step beyond merely learning programming procedures into the realm of real learning.

When we asked you at the Sunnyvale training what you would like help with, the most popular request was:

"To keep perspective that we are not teaching programming as a body of knowledge, but as a way of empowering the student to do what he or she wants to do."

This is Atari's goal also. Inner Game's involvement in ACC has - from the very beginning - been predicated upon that goal.

METALEARNING MADE PRACTICAL

Metalearning (being empowered to learn through learning a particular thing) is what Inner Game exercises are intended to encourage and facilitate. Through increasing awareness and self-trust, and helping you and your students tap into your real goals, consciously playing the Inner Game can have a dramatic effect on learning and teaching. It can help make learning the joyful, creative, powerful process it was meant to be.

"The true teacher protects his students from depending on him. The first thing he teaches is to walk alone."

- Isaac Bashevis Singer

YOU CAN'T TELL A BOOK BY ITS COVER

The remaining chapters include the following:

- o A wide selection of exercises and techniques, divided into four categories: independent learning, mental obstacles, "juice", and learning by teaching.
- o A "troubleshooting guide": techniques and advice for pinpointing your needs/problems.
- o Methods for modifying existing exercises and creating new ones to fit your own needs and personal style.

We feel these are the most solid building blocks we can offer you for developing your own optimal approach to teaching and learning.

GETTING THE MOST

In order to get the most from what's here, we'd like to suggest that you regard this book (and all other Inner Game materials) as resources - not as "have-to's." Use them when you remember to, when you want to, when you're curious, stuck for help or even just uninspired.

Approach this handbook according to your mood. When you're feeling adventurous, pick any exercise and experiment with it. When you're feeling businesslike, look up a particular "fix" for a particular problem. The possibilities are virtually unlimited.

One other suggestion - make notes all over this book! Really. Record any questions, ideas, reactions, innovations or doodles as they occur to you. You may be surprised at the effect it has on your involvement, enjoyment and creativity.



WHAT'S INNER GAME'S TASK?

To support you. We want to see learning happen, too. And we're ready and willing to talk over any discoveries and/or difficulties, to offer coaching or take suggestions. An Inner Game staff member will probably be visiting your camp sometime during the summer, but we're also available all summer long via Confer or by phone.

1 + 1 = 11

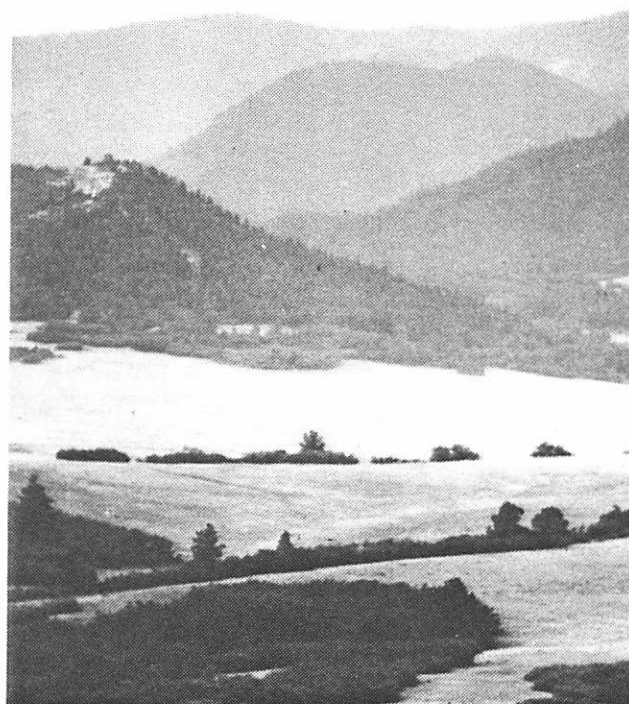
Not only is the Inner Game here to lend support, but so are all the other teachers, TA's and camp staff - all of whom have had their own brief introduction to the principles of the Inner Game. Given the variety of people involved, there are lots of possibilities for establishing the kind of high energy synergy that comes from daily interaction in such an enriched learning environment as you will be in this summer.

THE INPUT-OUTPUT OF INNER GAME

As in most activities, what you get out of playing the Inner Game is a direct result of what you put into it.

By experimenting with a few exercises or incorporating some of the awareness techniques into your teaching, you may notice a change in your perspective and responses. The more you explore, the greater effect you'll experience, and the more adept you'll become at helping your students tap their learning potential.

However much you use Inner Game, we have one request - enjoy yourself! Keep it light. Rely upon your own curiosity and intuition to take you further on this learning adventure.



2

Exercises & Techniques

"Q: What are some qualities of a good teacher?

A: Someone who understands people, and is careful not to hurt feelings or impair learning."

-- 13 year old computer student

What follows is a selection of exercises, suggestions and approaches to help you become the best teacher (and learner) you can be -- someone who not only doesn't impair learning, but actually helps it happen to the fullest.

We've arranged these exercises, as in your CCB, into four basic categories: independent learning, mental obstacles, "juice" and learning by teaching. We recognize that these categories overlap: some exercises in each could as easily be put in one of the other three. The important thing, however, is simply to experiment and determine which ones work for you.

Since you've already been introduced to these categories, we won't preface them here as we did in the CCB. We will end each section with a little "philosophizing," however -- suggestions for further exploration and reflection.

Let your curiosity be your guide...

INDEPENDENT LEARNING

"Q: How does a teacher actually 'get in your way'?"

*A: When you ask how to do something and he does
it for you, instead of you getting to do it."*

-- 12 year old computer student

EXERCISE #1: CHALLENGING STUDENTS TO LEARN

Purpose: To help you become a "detective" for how to turn a common teacher-student interaction into a learning opportunity.

When you notice yourself about to tell one of your students to do something (i.e. his/her program won't run and you're about to tell them how to fix it, take a few seconds before speaking to:

- a. Pinpoint things you notice in the situation that enable you to propose a solution (i.e. the program statements that are incorrect).
- b. Instead of challenging your student to do the "right" thing, how could you challenge the student to notice things which would let him/her see the solution independent of your continued intervention? (i.e. you might ask, "Can you tell me what lines 400-420 do?")

EXERCISE #2: ACCEPTING CHALLENGE

Purpose: To help kids see challenge clearly and set their own challenges.

If a student (or a whole class) seems to be resisting a challenge (new task or concept, debugging problem, etc.) ask him/her how hard it is 0-10, if 0 is "a piece of cake" and 10 is "impossible". Then ask how hard he/she would like it to be, on the same scale.

This simple "seeing what is" will usually help the student feel more in control and able to proceed with the task. If not, you can continue by:

1. Asking the child what he/she could do to bring the task to the desired rating. Or...
2. Asking him/her to try it for a few minutes, then let you know if their original "hardness" rating was high, low, or right on.

P.S.

This exercise is not just a way to get kids to do something. It helps them see the value of challenge, and find out what they can handle. It's also a valuable tool for you to use in finding out if a task is actually too difficult (or too easy) for a particular child's level of competence/confidence.

EXERCISE #3: STUDENTS TEACHING TEACHERS

Purpose: 1) To help kids become aware of how learning happens, 2) To help them feel empowered, 3) To develop skills helpful in self-teaching and in coaching other kids.

Next time you realize that a student knows more than you in a particular area of programming, you can use the situation to benefit you both.

First, acknowledge to yourself that you actually are less knowledgeable here than your student. Then let him/her know, and ask if they'd like to teach you for a few minutes. Before they begin, offer to give them a few guidelines to help you learn better. If they accept, ask that they:

1. First, help you find out why and how much you want to learn it.
2. Discover what you already know about it.
3. Find out what, if anything, you might already know that's similar.

As you're being taught, be sure to let the student/teacher know if you're understanding or not. This is extremely valuable feedback for him/her.

P.S.

Watch out for a natural tendency to want to remain "superior" by adopting an attitude of "I'm just doing this so you'll learn something." The more you can genuinely become the learner, more powerful this exercise will be for both of you.

EXERCISE #4: TOWARD INDEPENDENT LEARNING: A QUICKIE

Purpose: To help you stay clearly directed toward learning (rather than mere skill mastery) as a goal.

Spot check: in any student/teacher interaction, look for one learning opportunity you're not taking advantage of.

P.S.

This may, at times, be a bit confronting. It's often easier and/or quicker to simply convey information rather than help someone discover it for themselves.

EXERCISE #5: WHAT'S A LEARNER?

Purpose: To help kids become more aware of the qualities of a learner -- and of their own potential.

At the beginning of a class, ask your students to help you make a list of mental qualities that are good for enhancing learning. Encourage their ideas, add a few of your own (if they agree) and write them all down on a blackboard or flipchart.

Now, find the five or six most popular ones (by show of hands or "applause meter"), and circle them. Ask the students to write these circled qualities on a sheet of paper and rate themselves (on a scale of 0-10) how much of each quality they see in themselves.

Finally, collect their self-ratings, explaining that in a few days everyone will get a chance to re-rate themselves so that comparisons can be made to the first rating.

P.S.

This is a good exercise to do periodically during camp...And don't forget to include yourself!

EXERCISE #6: IMPATIENCE -- SEEING CLEARLY

Purpose: To help kids overcome their impatience by seeing their learning task more clearly.

If a child is being hindered by his/her own impatience, ask that they briefly write down:

1. What he/she's trying to do.
2. How long it will take (estimation).
3. Whether or not they're willing to expend that much time/effort.

If their answer is yes (to #3), then ask them to let you know after they finish how long it actually took to do it.

P.S.

Often impatience comes from a combination of fuzzy goals and unrealistic expectations. Sound familiar?

EXERCISE #7: COACHING EACH OTHER

Purpose: To heighten kids' sense of themselves as learners by providing guidelines for them to coach each other. To increase awareness of how learning happens (or doesn't happen).

If you notice kids having a hard time helping each other successfully:

1. Ask the child doing the talking if he/she knows whether the other child understands what's being said. Have both children rate the listener's understanding, 0-10, and then compare ratings. Then have both rate the talker's level of clarity/ simplicity, and again compare ratings.
2. (After the fact): Sit down with the "teacher" and let him/her know that you appreciate their efforts to help other kids. Then offer a way for them to become more helpful. Have the child write down three things they like least in their own teachers. Then ask them to rate, 0-10, how much they exhibit these same qualities when teaching/coaching other kids. Request that the next time they help somebody they check these qualities out and see how accurate their ratings are.

P.S.

This exercise can be very powerful if you can stay neutral. By avoiding the implication that the qualities listed are "bad", you can help a student see and accept what he/she is doing. Change will then happen naturally.

EXERCISE #8: GUIDELINES FOR QUESTIONS

Purpose: To make students more aware of the question-asking process so that they begin taking more responsibility for their own education.

Note: Two possible uses for these guidelines:

1. As suggested questions for you to ask students in order to help them get clearer on what they need.
2. As handouts to the students, with the introduction ("sell") that these guidelines will make them more independent and able to learn on their own.



GUIDELINES FOR ASKING QUESTIONS

1. What do you want to know?
2. Is there anything at all you might already know about the answer to your question?
3. What kind of other questions have you had that are similar to this one?
4. How would you find the answer if your teacher wasn't here?
5. If you could win \$10,000 for answering your own question, how would you do it?
6. What kind of question do you have? Is it about information (vocabulary, facts, procedures, functions) or is it about something else?
7. If you only had one chance to ask, how would you phrase your question so your teacher understood what you wanted to know?

IDEAS, REFLECTIONS

- Consider for a moment all that a child learns in the first six years of life: talking, walking, eating, dressing, singing, dancing, and social customs -- just to name a few. What qualities does a small child have that tend to get "smothered" (by teachers, parents, peers) as he/she grows older?
- What happens in the classroom that most hinders independent learning? Internally (inside the student)? Externally (includes inside the teacher!)?
- If you could change one thing about your own teaching that would help independent, confident learning in others, what would it be? (P.S. If nothing comes to mind, notice your teaching over the next few days and see what you might be doing to block learning.)
- What do you think kids feel gets in their way?
- Find one aid to real learning and pass it on (to fellow teachers, students, Inner Game staff...)

MENTAL OBSTACLES

"We have met the enemy and he is us."

--Pogo

The first group of exercises in this section offers methods for overcoming your own mental obstacles. The second provides techniques for helping students see and overcome theirs. (P.S. With slight adaptations, you may find that most of the exercises work for either strategy).

EXERCISE #9: STRESS MANAGEMENT: DISTANCING

Purpose: To reduce the effects of stress through non-judgemental awareness.

1. Ask yourself, "How do I know I'm stressed?" _____

2. Ask yourself, "Where in my body do I feel the greatest symptom of stress?" _____

3. Rate the degree of stress on a scale of 0-10. _____

4. As you continue your task, notice your stress location and rate the level every few minutes, noting any changes.

EXERCISE #10: STRESSORS: SEEING WHAT IS

Purpose: Reducing mental interference through non-judgemental awareness of the causes of stress.

If you find yourself feeling stressed, ask yourself the following:

1. What is it that's bothering you? (Be as specific as you can): _____

2. How much of this thing (event, situation, etc.) exists on a scale of 0-10, if 0 is "none" and 10 is "the most imaginable": _____
3. Now, keep noticing and rating the "stressor" over the next few minutes. See how accurately you can notice fluctuations.
4. In what way, if any, does its effect on you change?

EXERCISE #11: INJURIOUS VS. NON-INJURIOUS STRESS

Purpose: To increase awareness of the differences
between injurious and non-injurious stress.

A. Set yourself a task in an area where you feel un-
talented or incompetent: _____

1. Pick three words to describe your feelings
about doing this task: _____

2. As you begin to do it (yes, really do it!),
note any symptoms of mental or physical
stress. Rate their effect on you on a scale
of -5 to +5, if -5 is "paralyzing/negative",
0 is "none", and +5 is "energizing/positive".

3. On a scale of 0-10, how much confidence do
you feel about learning/performing in this
situation? _____

B. Now, set a very challenging task for yourself in
an area you know or feel comfortable in: _____

_____. Repeat steps 1-3 above.

Afterwards, note:

- How do the symptoms of stress differ in A and B?
- How do the effects differ?

- What could you look for that would let you see the difference in your students? (i.e., to discriminate useful challenge from harmful stress?)

EXERCISE #12: RECEIVING FEEDBACK

Purpose: To help you optimally benefit from the "negative" feedback you receive.

1. When receiving "negative" feedback from others (i.e. students, fellow teachers, spouse, etc.), rate the strength of your impulse to defend, preach, or argue with your "critic" on a scale of 0-10 (if 0 is no impulse to defend and 10 is "impossible not to respond.")
2. After rating, continue listening to the offered feedback and periodically rate yourself like you did in #1. What effect, if any, does this process have on you?
3. After trying #2 for a while, begin noting any one thing your "critic" is saying that you find particularly interesting (or new or absurd or profound, etc.) After a few minutes of noting this, re-rate yourself for defensiveness, preachiness or argumentativeness. What changes, if any, do you notice in the way you respond to negative feedback?

EXERCISE #13: HELPING STUDENTS REFOCUS

Purpose: To provide kids with a simple way to re-focus attention when their minds begin to wander during class.

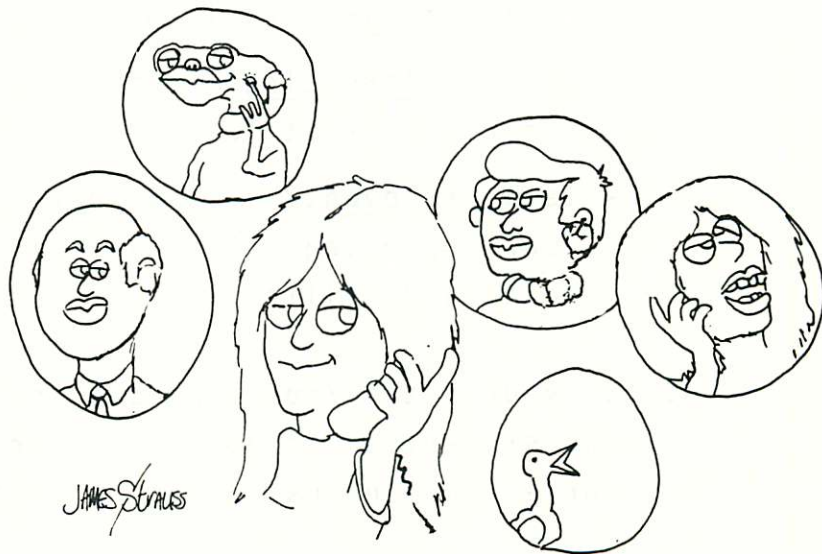
Note: This can be xeroxed and given to kids as is, or shared as an informal dialogue.

1. Who is the most spaced out kid you know? _____

2. How can you tell this kid's spaced out? _____

3. In what class in school do you get spaced out the most? _____
4. Any idea why? _____
5. Do you ever get spaced out when you'd rather be "spaced in"? (your mind wanders away even when you don't want it to?) _____
6. If you'd like to begin taming your wandering mind, here's a few simple games you can play during a "boring" class. Not only can these games be fun, but they will give you a way to learn more when you want to.

-
-
- a. Choose the most interesting "noticeable" thing about your teacher (i.e. their eyes, voice, walk, hair, smile, etc.) _____
- b. As he/she teaches, simply pay extra-special attention to this quality.
- c. Even if the subject is boring to you, simply by noticing the quality you picked in #1, you will begin to gain more control over your wandering mind. Learning will then become easier and more interesting.



EXERCISE #14: ATTENTION: FINDING A FOCUS

Purpose: To offer an attention focus that will facilitate learning.

Next time you notice a student (or a whole class) being distracted by some form of mental interference, try this:

1. Look for some detail of the task/subject which is a constant (i.e.: in the game of tennis this detail to focus on could be the seams of the ball):

2. Check your choice against the following:
 - Is it simple? (Will noticing be a burden?)
 - Is it interesting? (Will it hold the student(s) attention -- at least for a while?)
 - Is it relevant? (Is it part of what they're learning/doing, or only an interesting but unrelated detail?)
3. If your detail/focus passes this checklist, ask the student(s) to notice and/or rate the detail for a few minutes as they do/listen/watch.

P.S. Here's an example: Let's say you're trying to show a child how "fillto" works in PILOT, but he's impatient to the point of interference.

You could ask him to notice where on the screen the "fillto" seems to start. Or you ask him to tell you how many times the command "fillto" appears in the program. Or what's before or after it.

The power of this technique lies in changing the "trying game" into an "awareness game." When students (or teachers) feel they have to "do it right", the result is often mental interference in the form of anxiety, self-doubt, trying too hard, giving up, etc. When asked to notice something, however, few people feel threatened. Consequently, the mind quiets and becomes focused in a useful direction. Natural learning then begins to happen automatically.

EXERCISE #15: PRECONCEPTIONS -- A QUICKIE

Purpose: To help kids recognize and let go of limiting preconceptions.

Ask your students to write down all the negative impressions they have about themselves/others/computers/camp -- anything you sense might be a problem for them.

Then, ask them to rate how much they "buy" each one. (How much, on a scale of 0-10, do they really believe it.)

Finally, let them know that they don't have to believe any of it if they don't want to. End by asking everyone to crumple or tear up their list and throw it away.

EXERCISE #16: OVERCOMING SELF-DOUBT: SEEING WHAT IS

Purpose: To help kids recognize and overcome self-doubt when they are challenged.

If a child or class is resisting challenge:

1. Let them know you're going to present something challenging (new concept, programming assignment, etc.)
2. Ask them to note their own reaction as you're presenting it (via drawing, writing descriptive words -- whatever they feel best expresses it.)
3. Afterwards, ask them which they think will be worse (i.e. more uncomfortable): their reaction, or actually doing the thing.
4. Ask them to notice, as they do it, whether their prediction was correct.

P.S.

This exercise is good for both fear of failure and overconfidence. It helps kids distinguish expectations from fact.

EXERCISE #17: OVERCOMING SELF-DOUBT: PAST SUCCESS

Purpose: To increase self-trust by acknowledging past successes.

When students seem overwhelmed by the perceived difficulty of a problem:

1. Ask them to cite three problems/difficulties (outside of school) they've successfully resolved in the past year. (Give them possible examples, if necessary).
2. Get them to talk about the process they went through -- the discomfort, the discovery, the success. It is important here, during the time of their generalized pessimism, to get them to acknowledge they've "been through this before" and come out successful.
3. After they remember some successful past problem-solving episodes, ask if they can apply any of their successful strategies to their present dilemma.

EXERCISE #18: MENTAL OBSTACLE GUESSING GAME

Purpose: To help kids recognize and accept their mental obstacles without judgement (the first step to neutralizing these obstacles.)

If you notice kids who appear to be suffering from a mental obstacle of some kind, try making a game out of it, allowing them to see this obstacle without judging themselves or feeling judged by others.

First, let your student know that you can see they're having a difficult time.

Tell them that you're going to write down three guesses as to what the problem is, and ask that they write down what it really is. Then compare to see if you guessed right.

Usually just seeing it helps reduce it. Not feeling judged helps, too. Also, one of your "wrong guesses" may be closer to the truth than what the child is aware of or is willing to write down - particularly if your guesses have to do with possible mental obstacles. This way, the student can learn from what you've written and still "win" the game.

P.S. If you want to take this a step further, you can ask the child what he or she thinks might help overcome the problem. You might be surprised at what comes out!

EXERCISE #19: OK MISTAKES (A, B, C)

Purpose: To help kids overcome their tendency to judge themselves when making mistakes.

- A. If a kid seems particularly afraid of making a mistake:
 - 1. Ask him/her what's the worst thing that could happen if the mistake was made.
 - 2. Ask what's the best that could happen if it wasn't made.
 - 3. Ask if he/she can live with either.
- B. If a mistake has already been made, and the child seems upset:
 - 1. Ask him/her to rate how big the mistake was.
 - 2. Ask how big (0-10) he/she thinks the biggest programming mistake you ever made was.
 - 3. Tell him/her the truth!
- C. If a student (or students) seems chronically upset by mistakes:
 - 1. Ask them to write down three words that describe how they feel when they make a mistake.
 - 2. Ask them to circle the one they feel most.
 - 3. Tell them you'd like to know how much (0-10) they feel it the next few times they make a mistake, and if they notice anything that makes it less.

EXERCISE #20: OVERCOMING "FOG-OUT"

Purpose: To help overcome "fog-out" (boredom, distraction, spaciness) via increased concentration.

If you notice your students having a hard time concentrating, try the following:

1. Let the student(s) know that you're going to play a game about concentration.
2. Acknowledge that most of the time when we listen we're not "all here".
3. Ask them to note, as you're talking, what planet they're on -- if "Earth" is all here, "Venus" or "Mars" is a little 'spaced out', and so on. (If they're totally "absent", they can say they're out of the solar system!)
4. Continue presenting, and every few minutes, stop and see "where" everyone is, by a show of hands.

P.S.

The success of this exercise depends largely upon you. If "Earth" is implicitly "right", you may get a lot of "correct" answers -- but not necessarily true or useful ones. If the kids really feel the game is to notice where they are, they'll have fun and real change will happen automatically.

IDEAS, REFLECTIONS

- How do your mental obstacles affect your students?
How do theirs affect you?
- Which "MO" in your students do you feel least equipped to deal with? (Try turning to CHAPTER IV and creating your own exercises to help.)
- What do you think kids would feel is their most bothersome MO? What's yours?
- What one thing do you find yourself doing as a teacher that might create or increase mental interference in your students? (If nothing comes to mind, you might want to simply be aware of this possibility over the next few days.)
- What strategies have you developed on your own, to overcome your mental obstacles to teaching and learning?

"JUICE" .

"Q: What's your biggest complaint about teachers in general?

A: They teach things we will never use.

A: Their not letting you make up what you want to do."

--jr. high computer students

The following exercises all deal with "finding the juice" -- discovering and tapping the power of what you and your students would really like to do. Each of these exercises can be adapted for either your own use or for your students' use.

EXERCISE #21: PRE-CLASS DIRECTION-FINDING

Purpose: To find your own excitement and interest before beginning class.

1. Write down 1-3 things you want to do in class today:

-
-
2. Write down 1-3 things you'd like to learn today (about yourself, students, computers, etc.):

3. Write down 1-3 things you'd like to experience in class today (this can be as simple as you like -- "fun", "happiness", "affection for students", "sense of accomplishment", etc.):

4. Now, after each goal above, note obstacles that might interfere with attaining it (internal or external).
5. Are any of the obstacles insurmountable? If so, cross out the goals they affect.
6. Now, don't try to accomplish your goals. Just know they're there and experience your class!

P.S.

After class, you might want to review your goals and see how close you came to fulfilling them (0-10).

EXERCISE #22: SYNCHRONIZED GOALS

Purpose: To increase student/teacher trust and enthusiasm by increasing awareness of each other's goals.

1. Let the class know that you're going to be playing a game to discover what all of you want out of class (or camp).
2. Have them divide a piece of paper into two vertical columns (and let them know that you're doing it, as well.)
3. In the left column ask them to write a list of things they'd like to learn, do, or feel. (You choose the timeframe: "this class", "today" or "at camp".)
4. In the right column ask them to list what they think you'd like to do, learn, experience. Request honesty and assure anonymity.
5. Collect the sheets, pick the 4-6 most popular responses in each column, and write them on the blackboard.

6. Finally, record your responses next to theirs -- what you thought their goals would be, and what your actual goals are. Leave them up for the entire period and invite comments one-to-one.

P.S.

The more honest you are about your real goals, the better. Don't try to look ideal. (You're both probably in for an interesting shock to your pre-conceptions!)

EXERCISE #23: INSTANT JUICE CHECK - A QUICKIE

Purpose: To aid in quick recognition of present "juice".

When you feel uninspired, try this:

1. What would you most like to do right now, if you could do anything: _____

2. How would you feel (or what would you have) by doing that? _____

3. Is there anything you can do at this very moment to help you feel/have that?

EXERCISE #24: HEIGHTENING MOTIVATION

Purpose: To heighten motivation by creating self-set challenges.

If a student (or class) seems bored, uninspired, or resistant to a new task or assignment, try this:

1. Let them know that you're going to show them how to create their own tailor-made challenge/task.
2. Tell them that their self-made challenge can have a variety of interchangeable parts, like a machine. Write the four parts on the board:

DIFFICULTY (super-easy to super-hard)

TIME FRAME (morning, afternoon, evening)

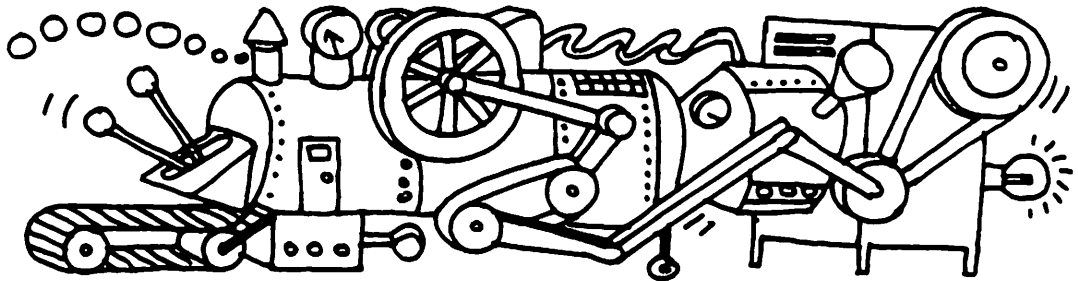
LEARNING GROUP (alone, with on other kid, in a group, with the teacher)

PLACE (lounge, computer room, outside)
3. Briefly explain the choices. Let them know that you're going to present a general task/challenge, and that each student will be allowed to "customize" it by choosing one alternative from each of the four categories.

4. Offer assistance, if needed, in the customization. Then do everything possible to accommodate their requests.
5. Finally, ask them to notice whether they like their choice while they're working on it. Be sure to let them know that they'll have more chances to experiment.

P.S.

This is a very fruitful area to explore. It not only taps into real motivation and choice, but fosters both real independence in learning and increased awareness of one's own optimal learning style.



EXERCISE #25: REAL VS. ASSUMED GOALS

Purpose: To learn to discriminate between the two.

Write down five things you feel you ought to be wanting from this summer's camp experience:

Write down five possibilities for this summer's experience that interest you:

- How do you feel about the first list? The second?
- How would you go about achieving the first five?
The second five?
- Which do you think would be easier? More fun?

P.S.

Do you ever try to tell kids, directly or indirectly, what they "should want"?

EXERCISE #26: HOOKING UP OLD AND NEW GOALS - A QUICKIE

Purpose: To take full advantage of existing "juice".
(This can be done on your own or with a single
bored, confused or uninspired student, or with
an entire class.)

What are three things/areas you're already inter-
ested in that computers will help you do or understand
better?

What are three things you'd like to know more
about (or be better at) that you think learning compu-
ting might help with?

*"Real learning takes place only in relation
to real goals."*

--John Holt

EXERCISE #27: TIME USE (A,B)

Purpose: To increase clarity of "what is" and what's needed, relative to time and tasks.

A. Feel overloaded? Quickly write down everything you have to do in the next 24 hours.

- Now, rate 0-10, which tasks you're most drawn to.
- Rate 0-10 which tasks are most necessary to accomplish.

Experiment: Discover which order of doing is most satisfying (i.e.: most to least necessary, least to most attractive, etc.) You may also find that simply rating your tasks makes it easier to automatically drop from your list those which rate low on both scales.

B. Don't know where the time goes? For the next hour, write down what you're doing every ten minutes ("a freeze frame"). Then, quickly rate your activity, 0-10 for how much you want to be doing it, and 0-10 for how necessary it is.

P.S.

Don't try to "mend your ways" and don't try not to! Simple awareness is a very powerful self-correcting tool and usually brings about automatic natural change.

EXERCISE #28: STUDENT JUICE FEEDBACK

Purpose: To help you tap into students' existing enthusiasm.

1. After presenting a new concept or task, ask kids to anonymously rate on slips of paper (on a scale of 0-10) how much they're excited/interested in it. Guess what you think their response will be while they're writing. Collect the slips and average the responses. Post the average on the board, with your guess next to it.
2. Now, present again the concept or task, and ask your students if their "juice" is more, less, or the same as before.

P.S.

This exercise provides invaluable feedback for you. It also provides a chance for kids to get in touch with their own juice, as well as the opportunity to feel that you value their response.

IDEAS, REFLECTIONS

- List five things you believe diminish kids' juice in class/school situations.
- List five things that diminish your juice.
- What do you think kids get out of the non-school stuff they like to do?
- If you could do anything you wanted to in class to get kids excited about learning what would it be? What could you realistically do that might produce the same results?

"Q: What would you be like if you were a computer teacher?

A: I would ask them what they wanted to learn. I would always check individually if they understood."

--13 year old student



*"Sometimes, if you don't understand something,
your teachers treat you as if you're defective
or something."*

--Karen, age 12

EXERCISE #30: NOT INDUCING SELF-DOUBT

Purpose: To help you recall memories of having
been led into episodes of self-doubt
so that your present relationships with
students may be free of the same.

1. Can you remember a person in your life who
doubted your potential in an area (i.e.
sports, travel, hobbies, etc.) you were par-
ticularly interested in? _____
2. Please list three ways in which this person's
doubt became noticeable to you (ways you could
tell they were doubting you):
 - a. _____
 - b. _____
 - c. _____

3. List some of his/her qualities that especially turned you off:

4. Which of these qualities tend to plague you in your own role as:

a. teacher? _____

b. husband/wife? _____

c. parent? _____

d. when you're overworked? _____

e. when you feel unloved? _____

f. when you feel underpaid? _____

5. Pick one of these qualities you notice in yourself as a teacher. Rate the level of it 0-10, periodically during a day. Notice how rating it affects the level.

P.S.

Again, don't try to 'make yourself change.'
Just see what happens as you increase your awareness.

LEARNING BY TEACHING

"Q: What's your biggest complaint about teachers in general?

A: Their superior attitude. They never admit they're wrong.

A: Most of them don't listen to you when you want to say something."

--jr. high computer students

The following exercises are all for you. Their purpose is to help you learn the most, have the best time, and be the most effective and sensitive teacher you can be.

EXERCISE #29: THE WORST TEACHER IN THE WORLD

Purpose: To help you accept responsibility for some of your less than optimal qualities, and to begin letting these qualities decrease in power by simply noticing them.

1. As a student, who was your least favorite teacher of all time? _____
2. Describe how he/she made you feel.

3. How did their doubt affect your performance?

Your learning? _____

Your overall experience? _____

4. On a scale of 0-10, how much do you think (in your role as a computer teacher) the kinds of things listed under #2 are part of your interactions with your students? _____

5. Taking the role of your most self-doubting student, how would you recommend your teacher change his/her way of relating to you in order to decrease whatever self-doubt you might be experiencing?

P.S.

Inducing self-doubt to some extent is almost universal in student/teacher relationships. So as a mortal human being there's no need to feel guilty! Increased awareness is the best catalyst for change.

EXERCISE #31: SUPPORTING STUDENT CONFIDENCE (A,B)

Purpose: To heighten student self-confidence through increased teacher awareness.

- A. If a student seems to be having a hard time (anxious, frustrated, resistant, apathetic, etc.) ask yourself:
 - 1. How do they feel about themselves at this moment on a 0-10 scale for the following: dumb-smart, slow-quick, or creepy-nice?
 - 2. Pick one (perhaps the lowest of the three). As you continue to interact with the student, notice if (and how) it changes.
- B. Notice the effect your "intervention threshold" has on the student's confidence level:
 - 1. Do detailed explanations and/or answers seem to raise or lower confidence levels?
 - 2. What effect does encouraging a child to find out something for him/herself have?
 - 3. Is it different for different children? Different types of tasks?

EXERCISE #32: INTEREST LEVEL

Purpose: To help you become more attuned to whether or not your students are "with you".

1. Rate a student's (or a class') level of interest in what you're saying at a given moment, 0-10.
2. Ask them how interested they are, 0-10 (explain that it's really OK for them to be completely straight, that you need this information to help you become a better teacher.
3. Repeat #1 and #2 at intervals throughout the day.

P.S.

Notice some clues that are accurate barometers of their interest. Notice how what you do changes the level.

EXERCISE #33: ASKING FOR FEEDBACK

Purpose: To learn to elicit honest, useful feedback from students and/or other teachers.

- A. When you want to ask a student or fellow teacher for feedback (i.e. about your presentation, the curriculum, their understanding/interest, etc.), try the following:
 - 1. As you ask, listen to yourself as a third person.
 - 2. Would you know what's being requested?
 - 3. Would you feel free to respond honestly, given the "vibe" of the request?
- B. A variation: ask for the feedback, then ask if the person you're speaking to:
 - 1. knows what you're asking.
 - 2. feels free to respond honestly.

EXERCISE #34: GIVING FEEDBACK

Purpose: To help you begin to give effective feedback to others.

A. When feeling a desire or need to express something to someone (about their performance, attitude, etc.) pick one of the following:

1. Do they already know what I'm about to ask them?
2. What result do I want to produce by telling them what I have to say?
3. What effect do I think telling them will have on their confidence level?

B. Ask yourself the question you've picked, answer it as best you can.

C. Notice changes in your approach, mode of expression, interest level/attentiveness to the one receiving your feedback.

P.S.

Next time, try picking one of the other questions and see what happens. This can be very illuminating...

EXERCISE #36: THE TEACHER CREATURE FROM THE GENDERLESS
PLANET

Purpose: To help diminish teacher stereotyping of
female students.

1. Let's say, as part of a galactic teacher exchange program, that Atari has invited you to teach in their computer camp as a representative from a planet 23 light years away. Technologically, your planet is about as evolved as the earth -- with micro-computers just beginning to be regularly used in the public schools. The only difference is that on your home planet there is only one gender -- no male and female -- only something called "bryzalak." Because there's only one sex on your home planet, there's obviously no such thing as male and female stereotypes.
2. Given this background, how do you think your classroom relationship to your male and female students might change during your brief stay here on earth?

3. Just for fun, try pretending today you really are from the genderless planet. You have absolutely no idea that girls are supposed to be more "math-phobic" than boys. You have no projections of which of the sexes will most likely end up as computer programmers. You even have no idea who is most likely to wear ribbons in their hair. At the end of the day please consider the following:

- a. Did you notice anything different about your teaching style?
- b. Did you notice anything different about your students' responses?
- c. Which, if any, habitual stereotyping mechanisms became most obvious to you?

EXERCISE #36: SPONTANEITY VS. STRUCTURE: I & II

Purpose: To help you discover your most effective balance between structure and spontaneity in a classroom setting.

Note: We included the first part of this exercise in your CCC -- we felt it was useful enough to "rerun" and elaborate upon.

1. Take a minute or two to do the following exercise at various intervals throughout a day's teaching.
 - a. If on a scale of 0-10 (0 being complete spontaneity -- everyone, you included, simply "winging it" -- and 10 is complete structure -- all students sitting in specified seats while you deliver a prepared lesson) how would you rate what's happening in your classroom right now? _____
 - b. As you do this periodically throughout the day, notice:
 1. What range from 0-10 do students in a group seem to enjoy the most? _____
 2. What range do you enjoy the most? _____
 3. In what range are students generally discovering or understanding the most? _____
 4. In what range do they seem the least comfortable? _____

5. When do you feel the least comfortable? _____

After you begin to become comfortable using the rating system in the first part of this exercise, try the following:

1. Aiming for the goal of maximum comfort and learning for you and your students, begin to experiment with various levels of structure and spontaneity.
2. What effect does alternating high structure with high spontaneity have?
3. Which of your teaching tasks are best accomplished in a high spontaneity environment?

A highly structured environment?

4. Again, experiment. You may be surprised...

A Useful Variation:

Use the same rating and noticing technique, but focus on individuals instead (especially those who prove the most "difficult"). How do their comfort and discomfort zones compare with those of the group?

"Q: How do teachers 'get in your way'?"

A: When they make things too complicated.

*A: When you ask a simple question and they
give a long explanation."*

--jr. high computer students

EXERCISE #37: ABSTRACT CONCEPTS MADE CONCRETE

Purpose: To help you simplify and concretize explanation of abstracts. To increase your awareness of student understanding.

Next time you have to explain an abstract computing concept to a student or class (i.e. randomness, looping, variables, etc.) try this:

1. Think of some physical phenomenon as a metaphor or analogy for the concept (i.e. Variables = wild cards. Looping = scratched record or repeats in music):

2. Using your concrete analogy, explain the concept. As you're talking, notice how simple/complex your explanation seems to you (0 = most simple, 10 = most complex).

3. After you finish, ask the kids how much they understood (0-10) and how simple it seemed to them (0-10).

4. If ratings don't satisfy you, try again.

P.S.

A fun and useful variation of this is to ask the kids to act out your analogy or, if so inspired, to act out their own analogy. For example, if randomness was the concept, you might ask two or three kids who understand it to figure out how to demonstrate it physically. (You can help, if they need it -- but they might have a much simpler, more effective way of demonstrating it than you can imagine.)

Last summer some kids at the San Diego camp demonstrated various degrees of randomness by moving at random within various physical boundaries (first, the whole room, then smaller, defined areas, then two different areas.) The class loved it and it proved easy to understand and "translate".

EXERCISE #38: THE EYES OF A CHILD: A QUICKIE

Purpose: Becoming a learner, staying fresh.

For the next half-hour, forget that you've ever been a teacher. You're a fourteen-year-old kid who's been given the temporary responsibility of helping out the other kids as best you can while the teacher's gone.

1. Does your new identity affect your stress level?
Enjoyment level?
2. What, if anything, changes in your interactions with the "other" students?
3. What, if anything, changes in your own attitudes about mistakes (your own and others')? Fun? Learning? Control?

"Education consists mainly in what we have unlearned."

--Mark Twain

IDEAS, REFLECTIONS

- What one thing do you think could be improved in your teaching through increased awareness? (If nothing comes to mind, look for possible "foggy" areas in your teaching over the next few days.)
 - Remember what you were like as a novice teacher. Do you feel you were more or less sensitive to your students' state of mind? More or less open to learning new things?
 - What's a good teacher? How do you suppose your students would answer that question?
 - What does it feel like to discover a new way of teaching something -- both pleasant and unpleasant feelings?
 - What would you most like to be able to do better as a teacher? (You might want to turn to Chapter III and see if your wish is covered in the exercise index.)
-

*"We shall not cease from exploring
and the end of all our exploring
will be to arrive where we started
and know the place for the first time."
--T.S. Eliot*

3

Troubleshooting

"There is always a wellknown solution to every human problem - neat, plausible and wrong."
- H.L. Mencken

TOOLS OF THE TRADE

Now that we've offered you a fairly wide selection of Inner Game exercises and techniques, we are including a chapter that will help you get the most possible benefit from them. It includes:

- o Methods for pinpointing problem areas as clearly as possible, (to help make it easier for you to respond appropriately).
- o An index of exercises to problems, (to guide you to "the right tool for the job" in dealing with common difficulties).
- o Information on offering these Inner Game techniques for your students' use, (to help in determining when that's appropriate and how best to do it).

IF I KNEW WHAT THE PROBLEM WAS...

It might not be a problem. How often have you heard or said something like that? Most of us recognize intuitively that just seeing something clearly can be half the battle.

When you're right in the middle of a situation, it's easy to lose perspective or get overly judgemental. You know something's "off", but you can't quite pinpoint it. The five techniques which follow are all intended to help you gain clarity and objectivity on the "trouble spots" -- that may arise in your teaching and learning this summer.



"If man makes it through the present stage of the universe, it will be because he has discovered himself."

-Buckminster Fuller

EXERCISE A - FOCUSING IN

- a) Sit quietly and close your eyes (if feasible). Ask yourself gently, "What's the matter?"
- b) Propose possible answers to yourself, either mentally or out loud. Notice how you feel physically as you think or say each one.
- c) When an answer "feels right" in your body (you may notice a feeling of relaxation, release, increased comfort, deeper breathing, decreased restlessness, etc.) explore it a little more. Propose expansions or variations of that answer, noticing what feels more or less "right."
- d) When you feel you're on the "bullseye", write down your answer as clearly as you can.

EXERCISE B - POSSIBILITIES

- a) Sit down with a piece of blank paper and a pencil. Write across the top of the page: WHAT'S THE PROBLEM?
- b) Now without thinking too much about it, begin to list possible answers. Don't try to be right -- in fact, throw in a few "crazy" ones for good measure ("My Aunt Edna gave me another shoehorn for Christmas", "Robots are stealing my luggage," etc.)
- c) After listing at least ten possibilities, rate each one 0-10, if 0 is "definitely not it" and 10 is "bingo!"
- d) Circle any that scored 8 or more. Now, turn the page over and again list the circled answers, this time without their ratings.
- e) Look at them for a few moments and then rerate them, using the same scale as before. If any still score 8-10, go for 'em.

EXERCISE C - HOW DO YOU KNOW?

(This exercise is useful when you think the problem may be connected to some kind of mental interference in you.)

- a) Sit quietly and close your eyes (if feasible). Ask yourself how you know there's a problem. Write down your response, worded like this:

"Because I feel _____"

- b) What behavior/event/situation triggers this feeling in you the most?

- c) If you know immediately, fine. You might want to turn to the index for help in dealing with it.
- d) If you don't know, try this: next time you're in class, note the level of this feeling in yourself -- when it rises significantly, look to see what's going on around you.

EXERCISE D - QUICK CHECK

(This one is especially good for on-the-spot troubleshooting.)

- a) When something in the classroom feels "off", but you don't know what it is, ask yourself "If I could change any one thing in this situation right now, what would it be?"

Your answer will probably give you at least a general idea of where the main problem is.

EXERCISE E - WRITE OFF

- a) Sit down with a piece of paper and pencil. Begin writing at the top of the page, as though beginning a story: "One week later, the problem was gone"... Now, continue the story, explaining what changed to resolve the problem.
- b) After you've written it, reread it. As you read your own version of the problem's solution, it will become clearer to you what the problem is.

ON-THE-SPOT AND AFTER-THE-FACT

These exercises can be used in two ways. During class, they provide techniques for gaining insight into present difficulties and/or needs. (Exercises A and C are particularly useful for this, since no writing is involved.) After class, they provide ways for you to learn from previous events and deal more effectively with similar situations in the future.

Once you've used an exercise to get clear on the problem, you may immediately see a solution. If not, you can refer to the index that follows for ideas.

A WRENCH? A HAMMER? A SKY HOOK?

Now to find the right tool for the job.

We've made up a list of problems, based both on what you communicated to us at Sunnyvale and on what we've heard from you since then. Each problem is matched with the exercise or exercises from Chapter II that we felt would be most helpful.

You might want to use this index to find help in dealing with chronic problems -- ones you've encountered over and over again during your years of teaching. Or you might use it to find solutions for acute problems -- those you've pinpointed using the preceding exercises, or that you've encountered in the unique situations of this summer's camp.

In either case, we hope you find it a valuable guide to utilizing your Inner Game exercises.

INDEX (with exercise numbers)

Attention

 helping kids focus 1,8,13,14,20
 perceiving students' level of 12,18,20,32

Boredom, tools for overcoming 13,14,18,20,24,32,36,37

Challenge

 knowing appropriate rate of 2,10,28
 to learn, rather than to do 1,4,5,8,14
 helping kids accept 2,6,16,24

Coaching

 each other, helping kids in 3,7,33
 as a teacher 1,13,14,18-20,34,38

Concentration, heightening 1,13,14,20,24,36,37

Concrete ways to teach abstract concepts 14,37

Confidence

 building in kids 3,16,17,19,30,31
 perceiving lack of 16,18,31

Connecting computer learning to other activities 5,17,23,26,37

Fear of failure, overcoming 2,16-19,30,31

Feedback

- giving 1,18,30,31B,34
- receiving 3,12,28,32
- eliciting 5,18,20,22,33

Fogout, recognizing and overcoming 1,13,14,18,20

Getting everything done 21,27,36

Goals

- staying focused on 4,21-23,25,27
- finding out kids' 8,22,24,26,28
- real vs. assumed 4,22,25,32

Impatience, overcoming 2,6,14,18,24

Independence, building in students 1-3,7,8,24,31B

Mental obstacles

- seeing your own 3,9,10,12,29,30,35
- tools for helping kids see and deal with 2,6,7,13-20,34
(SEE ALSO: Boredom, Fear of failure,
Concentration, Fogout, Impatience,
Confidence, Motivation, Stress)

Mini-nationalism, overcoming 15

Mistakes

- creating environment where OK 1,18,19,29,30
- helping kids accept 4,19,29-31,35

Motivation

heightening in self 21,23,25,26,38

heightening in students 2,22,24,26,36

(SEE ALSO: Goals)

Perspective, on teaching programming as a way of empowering students to do what they want 1,4,5,19,21,38

Stress

seeing and reducing in self 9-12,38

seeing and reducing in students 6,7,10,16,18,19,31

Teaching, more effective 1.4.13.22.27.29.30-38

ONE FOR ME AND ONE FOR YOU

You may find yourself feeling that many of the exercises created for you would be great for your students, too. You're probably right. Here are some guidelines for offering Inner Game exercises to students:

- 1) Check your motivation. Are you encouraging a child to do an exercise because you think it will help his/her learning, or because you want the child's behavior to change? Kids, as you've probably noticed, are remarkably sensitive to coercion and tend to resist it, either consciously or subconsciously.

- 2) Focus on the student's response. Is the child genuinely interested in what you're offering, or merely tolerating it? These exercises aren't something you can force someone to do.
- 3) GETTING to versus HAVING to. This is an extension of guideline #2. Listen to your communication. Are you presenting Inner Game as a possibility, an experiment, or as a requirement (implicitly or explicitly)?
- 4) Speak from your own experience. Notice the difference in response when you offer kids exercises you've tried and found useful, as opposed to those you've merely read through. Personal experience is a powerful communicator and motivator. Kids can feel it when you're excited about a discovery, too.

AND SO...

The troubleshooting portion of your handbook draws to a close. We feel that what we've presented here can play an important part in making Inner Game a practical and integral part of your teaching and learning this summer.

We further suspect that it might help bring you to the point of feeling a need for what the following chapter is designed to address...

4

The Next Step

*"It's what you learn after you know it
all that counts."*

--John Wooden, UCLA

AND THAT'S EXACTLY...

What this chapter is all about. We've given you a wide selection of teacher-tested Inner Game exercises. We've offered some techniques and guidance for getting the most out of them. Now what?

Here's where you take charge. Consider this as a kind of Bon voyage party into the high seas of your own exploration.

First we'll talk a bit about experimenting with what you've already been given. Then we'll offer some techniques and insights to help you create your own Inner Game exercises. Finally, we'll talk about "self-generation" -- where consciously playing the Inner Game becomes an increasingly natural, integral part of your life. (And where, oddly enough, you may start to see that you've been playing it all along...perhaps just not winning.)

COME INTO MY LABORATORY

Two things make experimenting with Inner Game exercises fun and easy. To begin with, there aren't any rights or wrongs -- only what works for you and what doesn't. Secondly, you can't blow anything up.

Seriously, folks -- the worst thing that could happen is a bit (or byte?) of momentary confusion or embarrassment. Perhaps reviewing a brief summary of the basic Inner Game principles will be useful here:

- 1) The will of the learner is the fuel of learning.
- 2) Trust in innate ability is essential to stepping beyond present knowledge.
- 3) Awareness (or attentiveness) is the medium of learning.
- 4) The main obstacle to learning of any kind is the mental interference created by self-doubt.

These four understandings are the foundation of the Inner Game. The goal of any Inner Game exercise is to overcome mental interference (4) -- and thereby free learning potential -- (by developing awareness, trust, or will -- #1, #2, or #3.)

As you use Inner Game techniques, you'll begin to see how each exercise works in one of these three areas:

AWARENESS: The skill of focusing attention on the events of the moment, without judging them good or bad.

TRUST: The skill of seeing and relying on the natural wisdom and ability within you.

WILL: The skill of discovering, clarifying and utilizing one's real goals.

As you begin to experiment with an Inner Game exercise, check to see which skill is being developed. Knowing this will give you a clearer idea of how you might modify it to make it more effective.

The best and simplest check, however, for how useful an exercise is:

DOES IT FEEL GOOD AND DOES IT WORK?

Some things work but feel terrible, while others are lots of fun and completely ineffective. If an exercise gives you both, you're on the right track!

CREATIVITY

"What have I done?"

--Dr. Frankenstein

The most important thing in creating something new is that you not take yourself too seriously. Self-judgement is lethal in new territory.

Fortunately, you're in a much less high-risk situation than poor Dr. Frankenstein. The worst that can happen here is that something simply won't do what you thought it would...and you'll get a clear sense of what not to try next time.

To provide parameters for your creative endeavors, we've put together a basic guide for making an awareness exercise. Of the three skill areas (awareness, will and trust), by far the majority of Inner Game exercises focus on increasing and directing awareness.

HOW DOES IT WORK?

You've probably already experienced it somewhat, but Inner Game awareness exercises work something like this: by focusing your attention on some part of the learning task, the mind automatically quiets. Mental "noise" subsides and the learner consequently becomes more receptive. Learning, enjoyment and performance naturally increase.

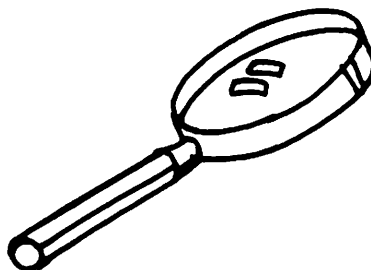
So, how to find an appropriate awareness focus? We've found that an effective focus point has three qualities:

- o It's simple
- o It's interesting
- o It's relevant to the task at hand

Here's an example of a simple, interesting and relevant point we direct our attention to daily: noticing the temperature of the water falling on our hand before we enter the shower. We direct our attention, then learn from and act on our experience.

There are a great many examples of this natural "awareness feedback loop" in our daily lives. Mostly, though, they happen in areas where we don't doubt our competence: driving, walking, doing household chores, etc.

In areas such as learning computers (where we tend to doubt and judge ourselves) it's extremely helpful to be able to consciously create appropriate awareness focuses.



THE PROCESS

The first step in creating an awareness exercise is knowing what you want to use it for. As clearly as you can, write down the problem/need you'd like to affect with your exercise:

Now restate it in terms of what result you'd like to see. (For example, if the problem was: "Johnny's inability to deal with "bugs", a "result" restatement might be "for Johnny to be able to "debug" his programs."):

Imagine that the goal has been fulfilled. Now, look to see what behavior has changed in the imagined situation. (It might be "Johnny's not frustrated" or "Johnny's not giving up so easily."):

Instead of trying to change that behavior (the classic and all too often unsuccessful response), notice where you could focus your attention in that behavior (perhaps "how high is his frustration level at any given moment" or "how close is he to giving up right now"):

By focusing your attention non-judgementally, you'll see the situation more clearly and respond more naturally, appropriately and effectively.

AND FOR THE STUDENT

To take it a step further: it's almost always useful for the student to become aware of the same thing you're becoming aware of. For example, in the case of Johnny and the bugs: "Johnny, on a scale of 0-10 how frustrated do you feel right now? Hmm, well, how about looking through the program again and letting me know when it gets above an 8."

Keep exploring, using awareness as the probe ("A 9? What's happening right there that bugs you?")

As you become more adept, you'll see how powerful directing your own and the students' awareness can be. It's the most effective means for helping someone learn from his or her own experience.

If an awareness focus you've created isn't working, ask yourself three questions to help in modifying it:

Is it simple? (Is the focus more of a hassle than the problem?)

Is it interesting? (Am I interested in looking at it -- will it hold my attention?)

Is it relevant? (Is it part of the situation... or is it something interesting, but unrelated?)

SEEING VS. DOING

It's essential that these focuses be communicated as awareness challenges and not performance challenges. For instance:

"Johnny, how high is your frustration level?" is an awareness challenge: it asks the child to notice something.

"Johnny, can you try being a little less frustrated?" is a performance challenge. It asks him to do something.

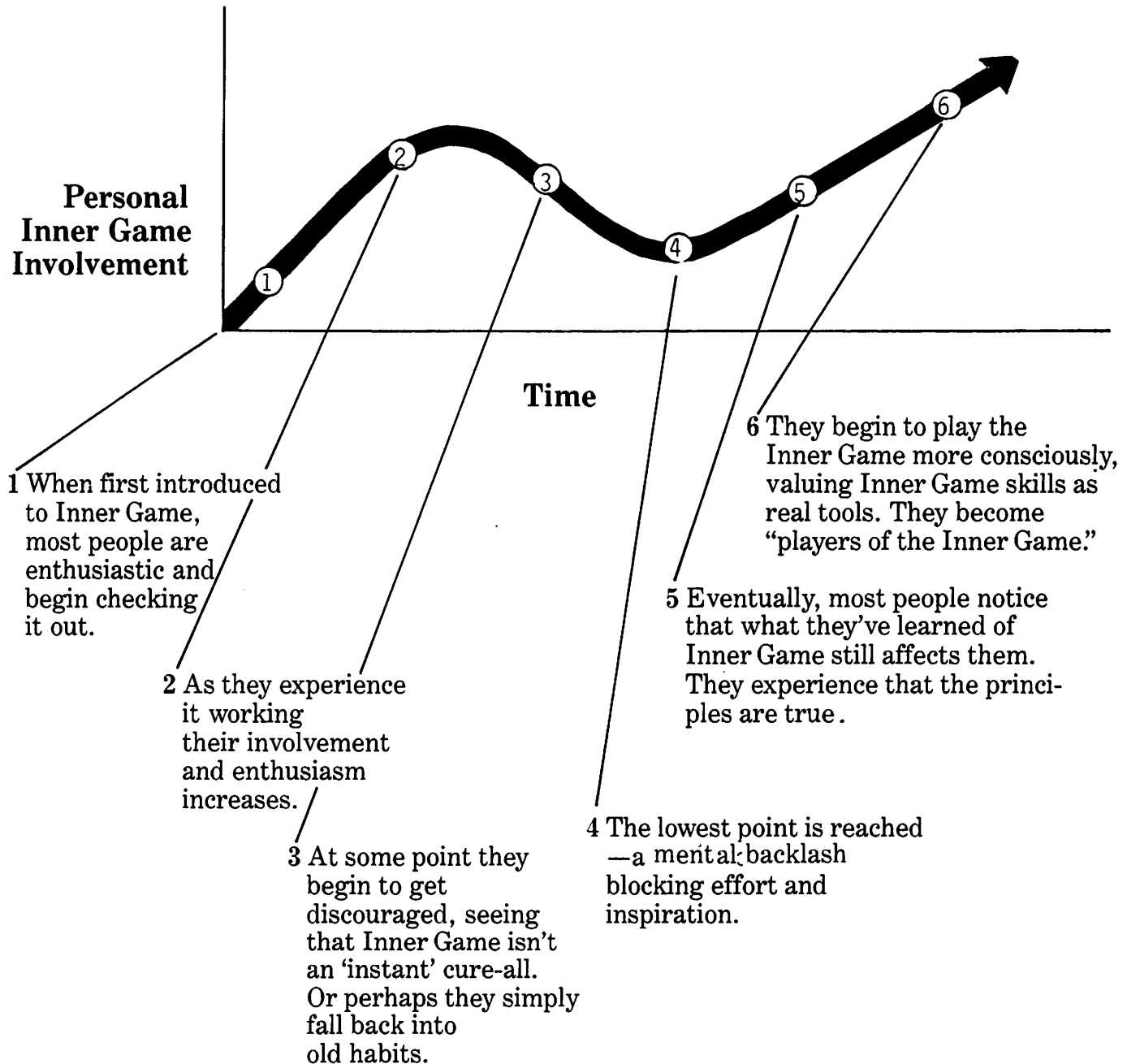
"Do" instructions amplify existing self-doubt and do not create an experiential feedback loop. They're appropriate only when there's little or no self-doubt.

AND BEYOND

As you explore further, you'll probably encounter two more "Inner Game phenomena." The first, which we've dubbed "the Inner Game Curve", goes something like this



THE INNER GAME CURVE



PLAYING THE GAME

The second phenomenon is the last step of the Inner Game curve -- becoming a "player of the Inner Game."

You'll know it's happening when you start automatically looking for a place to focus your attention in difficult situations; when you naturally look to find your "juice" or goals if you're feeling foggy or uninspired; when you immediately make up mental scenarios to help yourself "let go" if you're not trusting your potential (or a student's).

The reason it feels so natural is that we're all "players of the Inner Game". We all have strategies for overcoming our mental obstacles. It's just that we usually don't play very consciously. Or very well.

The ultimate aim of all that we've offered you here? Simply, for you to reach a point where you play the Inner Game more and more consciously -- and win.

"There are things that are known and things that are unknown; in between are doors."

--Anonymous

5

Last Words

LAST WORDS

"I know of no more encouraging fact than the unquestionable ability of people to elevate their life by a conscious endeavor."

- Henry David Thoreau

"The last of man's freedom is his ability to choose his attitude in a given set of circumstances."

-Victor Frankl

And that, in a nutshell, is what we hope will happen this summer.

As you already know, computers are - or can be - wonderful tools for learning. They're non-judgmental and infinitely patient. They invite clear thinking, creativity, originality, experimentation and independence. It is the teacher that determines, to a large extent, whether the computer's potential as a learning tool is realized.

We've presented you with the best we have to offer - tools which can enable you to:

- o Stay focused on your real learning goals, and help students discover and focus on theirs.
- o Recognize and neutralize the effects of mental interference in yourself and others.
- o Build real self-trust and non-judgement in students.

AND THE END RESULT?

Ultimately, we hope that each student and teacher consistently experiences the state of mind most conducive to learning. We hope that everyone participating in the Atari Computer Camps becomes confident, eager and adept learners - regardless of environment. And finally, it is our goal that everyone enjoys the process, experiencing the joy of finding out what real learning is.



"To really learn something, to feel it and know it and understand it in your bones, is ecstasy of the purest sort."

- George Leonard

Bon Voyage!

P.S. We're only a modem away.....

